

# **National Geospatial Development Center (NGDC)**

## **Activities and Projects**

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### **ABSTRACT**

The National Geospatial Development Center (NGDC) supports the natural resource business needs of the USDA Natural Resources Conservation Service through the innovative use of GIS and other technology tools. We are responsible for the use, application, and integration of geo-technology tools to support and expand the efficient delivery of NRCS programs, with an emphasis on resource inventory and mapping activities. The center works closely with NRCS staff at field, state, and national offices, other federal agencies, university researchers, and the private sector to achieve these goals. The NGDC was established in 2004 by congressional earmark as a collaboration of the NRCS and West Virginia University (WVU). We are located on the WVU campus in downtown Morgantown. Our personnel include NRCS and WVU staff, contractors, and WVU undergraduate and graduate students.

Current NGDC sponsored projects include:

Soil Resource Inventory Toolbar (SRITB) version 1.1.18 ArcGIS 9.2

- Digital Editing
- Analysis PC (GIS overlay analyses using Pedon points)
- Pedon PC version 3.01
- NCSS Cooperator Soil Characterization Laboratory Data Entry Program

Soil Series Extent Mapping Tool (SEM)

- Upgrade includes June 2007 acreages and Taxonomic query capability

Major Land Resource Area (MLRA) Explorer Tool

- Easy to use spatial query and report generation from Ag Handbook 296

Digital Soil Mapping in the NCSS SharePoint Site

- Peer review of Digital Soil Mapping GIS methods

National Soil Geospatial Database (NSGD) project

- national spatial reference and topology standard for seamless SSRUGO
- Versioned (Check Out/Check In) function

Textual Content Management and Delivery within NASIS

- manuscripts, manuals, handbooks, photos, figures, etc.

Historical Replica Project

- scanning and creation of PDF replicas of paper soil surveys

University Research Projects sponsored by NGDC

See NGDC web link for Research Program

Other NGDC Research Projects

- North American Soil Characteristics Data Base (NOAM-SOIL) Project
- Soil Disaggregation Methods – Canada/US Case Study (MLRA 55A)
- GlobalSoil.net (Gates Foundation Project) North American Node

NGDC Sponsored Training

- Western States Remote Sensing Workshop Spring 2008 Phoenix, AZ
- Remote Sensing Curriculum Update

These activities and projects are reviewed and described.

## **REFERENCES**

National Geospatial Development Center West Virginia University web page

<http://www.ngdc.wvu.edu>

Digital Soil Mapping in the NCSS SharePoint Site

[https://sharepoint.ngdc.wvu.edu/sites/digital\\_soils/default.aspx](https://sharepoint.ngdc.wvu.edu/sites/digital_soils/default.aspx)

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